

Attachment C

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Long Term Care Model(s) and Assumptions

Model(s)

Projection results are based on a projection of 173,870 policies inforce as of 6/30/06 from business issued through 6/30/06. CalPERS LTC business consists of facility-only and comprehensive policies and includes a variety of elimination period/benefit period/inflation coverage combinations. A summary of the model cells we used for projection purposes has been included as Attachment E.

Please note that we combined policy information for each potential model cell for which there were few inforce policies into a projection model cell that had the most similar benefit design.

Actually, projection results for each cell reflect output from three different models. The first model generates base policy projections, the second generates premium waiver projections, and the third generates return-of-premium benefit projections. Given that the first two models are built from the same model chassis and the relative insignificance of waiver-of-premium and return-of-premium benefits as compared to base policy benefits, the remainder of this attachment will focus on the base policy benefit models. Please note that the assumptions used for the latter two models are consistent with those used in the corresponding base policy projections.

Inforce Business as of 6/30/06 - Distributions of Business

The following distributions of business for all business inforce as of 6/30/06 are included in Attachment F:

- By benefit period and elimination combination
- By issue-age and attained-age
- By plan
- By inflation option
- By gender
- By marital status
- By premium mode
- By underwriting type

Please let me know if you would like to see any additional detail relating to the 6/30/06 inforce business.

Assumptions

Please note that detailed assumption printouts can be readily generated from each model for every model cell. The following subsections discuss the various assumptions used and include summaries of assumptions used throughout all of the model cells.

Morbidity

From a modeling standpoint, the following morbidity assumptions were used:

Ultimate Claim Costs - These vary by benefit design, gender and attained age, and were developed as described in this report.

Selection Factors – These vary by issue-age band, duration and underwriting type, and were developed as described in this report.

Claim Payment Distributions – These vary by age at claim incurral, benefit period and claim duration. As referenced previously, they were updated for this valuation to reflect emerging experience and were developed to be consistent with current liability/reserve levels.

Morbidity Improvement - Future morbidity improvement of 1% per year has been assumed to proceed 20 years from the valuation date. We also made a corresponding mortality improvement assumption.

Inflation Adjustment – Appropriate morbidity adjustments are made for policies with inflation protection.

Adjustments to Reflect Individuals Already on Claim – These vary by benefit period, issue age and duration. They are used to adjust the assumed claim costs to be on an exposure basis consistent with that used in the projection model.

Policy Terminations

We performed a study comparing inception-to-date actual total termination rates by issue-age band and duration to previous voluntary lapse rate and mortality assumptions.

Regarding assumed mortality, the following were used for all projection cells:

- 1994 GAM table along with 100% of projection scale AA.
- Selection factors by policy year as follows:
 - PY1: 0.39
 - PY2: 0.49
 - PY3: 0.57
 - PY4: 0.64
 - PY5: 0.67
 - PY6+: 0.71

Regarding assumed voluntary lapse rates, the following were used for all projection cells:

Issue Age	<u>PY 1</u>	<u>PY 2</u>	<u>PY 3</u>	<u>PY 4</u>	<u>PY 5</u>	<u>PY 6</u>	<u>PY 7</u>	<u>PY 8</u>	<u>PY 9+</u>
<40	4.70%	3.50%	2.90%	2.30%	1.80%	1.80%	1.80%	1.80%	1.80%
40-44	3.30%	2.30%	1.80%	1.40%	1.10%	1.10%	1.10%	1.10%	1.10%
45-49	3.30%	2.30%	1.80%	1.40%	1.10%	1.10%	1.10%	1.10%	1.10%
50-54	2.70%	1.90%	1.40%	1.00%	0.80%	0.70%	0.70%	0.70%	0.70%
55-59	2.70%	1.90%	1.40%	1.00%	0.80%	0.70%	0.70%	0.70%	0.70%
60-64	1.90%	1.10%	0.70%	0.50%	0.50%	0.40%	0.40%	0.40%	0.30%
65-69	1.90%	1.10%	0.70%	0.50%	0.50%	0.40%	0.40%	0.40%	0.30%
70-74	1.80%	0.70%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%
75-79	1.80%	0.70%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%	0.40%
80-84	1.70%	1.60%	1.20%	1.10%	1.00%	1.00%	1.00%	1.00%	1.00%
85+	1.70%	1.60%	1.20%	1.10%	1.00%	1.00%	1.00%	1.00%	1.00%

In addition, lapse rates were increased to reflect claimants that exhaust limited benefit periods.

Expenses

We used the following expense assumptions:

- Regarding fixed dollar expenses:
 - We assumed that fixed LTCG administrative fees would be \$131,100.10 per month and that CalPERS operational expenses would be \$100,000 per month through January 2007.
 - We increased these values by 3% in February of each year through 2012.
 - Beginning in February of 2013, we increased the prior year's fixed monthly expense by 3%, but then reduced it by the ratio of current premium to the prior year premium. The intent of this is to adjust for the fact that if the program volume declines, expenses will need to decline as well.
- LTCG administrative fees of \$2.69 per member per month.
- LTCG claim administrative fees equal to 3.78% of incurred claims.

All non-fixed-dollar expenses are also assumed to inflate at 3.0% per year.

Discount/Investment Rate

Regarding investment earnings, we assumed 7.79% on both assets and annual cash flows per the direction of the CalPERS Board.